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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,925	12/12/2003	Axel L. Bernhard	941292-100001	2233

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Research Triangle Park, NC 27709

EXAMINER

EVANSKO, GEORGE ROBERT

ART UNIT	PAPER NUMBER
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3762

MAIL DATE	DELIVERY MODE
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11/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/734,925

Applicant(s)

BERNHARD ET AL.

Examiner

George R. Evanisko

Art Unit

3762

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-14, 16-19 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 21, 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/22/08 has been entered.

Election/Restrictions

Claims 4-14,16-19 and 22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/21/07.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 21, and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, "connected to an electrical power supply" is inferentially including the power supply. It is unclear if the power supply is being positively recited or functionally recited. It is suggested to first state "...including: an electrical power supply; an electrical current control circuit connected to said electrical power supply...". In line 10, "that at least one electrical power

supply" lacks antecedent basis. In line 19, "can act" is vague since the use of the word "can" does not state that it does act in a specific way. It is suggested to delete "can" and use "acts". In line 19 and line 20, the claim is confusing. In line 19, the claim states that the probe is one of three (active, return, OR disconnected), but in line 20 the claim states it is all three (AND), and therefore the claim is vague since it can not be determined if the system operates in all three or can operate in just one of the three. The examiner has interpreted the claim as using "OR" since that is the broadest reasonable interpretation. In line 20 and 21, "the selection" and "the activation" are vague and lack antecedent basis since the probes are only "connected" and no element has been set forth to activate the switches.

In claim 21, "a single unit" is inferentially included. It is suggested to first state the system further comprises a single unit (or housing) and that the devices are in the unit.

In claim 23, line 11, "connection of the output of the electrical power supply" lacks antecedent basis and is vague since this is a positive recitation of a connection to the power supply. The power supply has only been functionally recited in line 5. In line 13, "can act" is vague. In line 13 and line 14, the claims use "AND" and "OR" and it is unclear if one state or all three states are being claimed. The examiner has interpreted the claim as being an OR claim. In line 14, "the selection" lacks antecedent basis. The claim has not set forth that there is a selection, but just a connection of the probes. In line 15, "the activation" is vague since no element has been set forth to activate the switches. In the next to last line "causing establishment of electrical currents" is vague since the claim has not positively recited any electrical power supply or element to supply current.

In claim 24, “between the electrical power supply...” is vague since the power supply has not been positively recited for the control device to be between it.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bartelt et al (5063929). Bartelt shows four electrodes (e.g. figure 1, 32, 33, 35, 36, that provide different current paths through the body), two switching devices (e.g. 40, 41, 42, and/or 43) in figure 9A for electrodes 32 and 33 to allow the electrodes to operate in an active, return AND/OR disconnected state since biphasic pulses are provided (e.g. figure 3, col. 6), being controlled by switching element 47/38 (e.g. figure 1 and/or 9A). NOTE, the use of OR means that the probe only has to operate as one of three and not all of the three. In addition, Bartelt discloses a power supply, 15, connected to electrical current control circuit (e.g. 16 or figure 9a, elements 49 and 50, or figure 10, 115, 116, etc) since these elements control the current to provide a DC output (e.g. col. 3, line 17) or constant current biphasic pulses

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 21, and 23-25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rise (4390023). Rise shows two switching/multiplexing devices as 110 and 115, with switching control devices or multiplexing control device, e.g. 107 and 108 or 105 and 100, for providing biphasic pulses (e.g. col. 4, line 63) to the probes (e.g. fig 2) that act as a return, active, and/OR disconnected probe (NOTE, the use of OR means that the probe only has to operate as one of three and not all of the three). In addition, Rise discloses a power supply connected to electrical current control circuit as elements 125 and 120, respectively, or discloses the current control circuit as element 125 with the device inherently having at least one electrical power supply since the device must contain a power supply to function. Finally, the device operates as a single unit to supply the stimulation and therefore the switching devices are in a single unit.

In the alternative, Rise discloses the claimed invention except for the power supply and the switching devices being in a single unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include in the electrical device as taught by Rise, a power supply and the switching devices in a single unit since it was known in the art that

electrical devices contain a power supply to provide power for the device to operate and since it was known to provide two switching devices into a single unit to reduce space and power requirements and since it has been held making integral a device that was previous separate is merely a matter of obvious engineering choice (In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)).

Claim 21 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bartelt et al (5063929). Bartelt's device operates as a single unit to supply the stimulation and therefore the switching devices are in a single unit.

In the alternative, Bartelt discloses the claimed invention except for the switching devices being in a single unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include in the electrical device as taught by Bartelt, the switching devices in a single unit since it was known in the art that electrical devices provide two switching devices in a single unit to reduce space and power requirements and since it has been held making integral a device that was previous separate is merely a matter of obvious engineering choice (In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)).

Claims 3, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartelt et al. Bartelt discloses the claimed invention using a multiplexer control device, 38, to control the switches except for the switching devices being multiplexors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electrical device as taught by Bartelt, with the switching devices as multiplexors since it was

known in the art that electrical devices use multiplexors as switching devices to provide a conventional and easily implemented way to switch a multiple signal input into one output line.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment. The claims still use alternative language such as "OR". But note that Bartelt states his system can operate his electrodes as active, return, and disconnected. In addition, the applicant has not stated why Rise does not read on the claims. Rise specifically states that his system selects different pairs to deliver spatial patterns of electrical stimulation (e.g. abstract) and contains all the elements listed in the claims. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Evanisko whose telephone number is 571 272 4945. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571 272 4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George R Evanisko/
Primary Examiner, Art Unit 3762

GRE
11/5/08